DOCUMENT RESUME

ED 131 557 EA 008 877

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TITLE An Evaluation of Arena Scheduling at Templeton Secondary School During 1975-76.
INSTITUTION Vancouver Board of School Trustees (British Columbia). Education Services Group.
REPORT NO RR-76-02
PUB DATE Jan 76
NOTE 23p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Experimental Programs; Parent Attitudes; *Program Evaluation; Questionnaires; *Scheduling; *School Surveys; Secondary Education; Student Attitudes; Students; *Tables (Data)
IDENTIFIERS *Arena Scheduling; British Columbia (Vancouver)

ABSTRACT

In June of 1975, students at Templeton Secondary School used a procedure called "arena scheduling" to assist in the construction of their timetables for the 1975-76 school year. Although courses had been selected previously with the aid of a counselor, arena scheduling allowed students some freedom in the choice of the teacher or time of day or semester that they wanted for a particular course. To examine reactions to arena scheduling, questionnaires were given to samples of students and to all staff members. Responses of the students were generally favorable, particularly when preferred teachers and/or times were obtained. Most of the teachers agreed that the advantages of arena scheduling outweighed any disadvantages. Although there were many suggestions made to modify and improve the arena scheduling procedure, most of the respondents to the questionnaires favored its retention at Templeton. (Author)

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AN EVALUATION OF ARENA SCHEDULING AT TEMPLETON SECONDARY SCHOOL DURING 1975-76

Research Report 76-02
January, 1976

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EA 008 877

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ABSTRACT

In June of 1975, students at Templeton Secondary School used a procedure called "Arena Scheduling" to assist in the construction of their timetables for the 1975-76 school year. Although courses had been selected previously with the aid of a counsellor, Arena Scheduling allowed students some freedom in the choice of the teacher or time of day or the semester which they wanted for a particular course.

To examine reactions to Arena Scheduling, questionnaires were given to samples of students and to all staff members. Responses of the students were generally favourable, particularly when preferred teachers and/or times were obtained. Most of the teachers agreed that the advantages of Arena Scheduling outweighed any disadvantages. Although there were many suggestions made to modify and improve the Arena Scheduling procedure, most of the respondents to the questionnaires favoured its retention at Templeton.

EVALUATION OF ARENA SCHEDULING

TEMPLETON SECONDARY SCHOOL

INTRODUCTION

In June of 1975, Templeton Secondary School was busily involved in the construction of student timetables for the 1975-76 academic year. Each student selected courses in March and the computer was employed, as in previous years, to prepare tentative timetables. At this point, however, a new procedure called "Arena Scheduling" was used to construct final timetables for the upcoming year.

Basically, Arena Scheduling involved sending randomly chosen groups of students into the "arena" (i.e., the "old gym" at Templeton) where they were confronted with an array of teachers, sitting at desks and grouped by departments. Students then proceeded to "sign up" for their desired classes according to their own tentative timetables. If a course had already been filled, the students were to readjust their timetables accordingly.

In essence, though, students were selecting only the teacher or time of day (i.e., block) or semester which they wanted for a particular course; the course itself had been selected in March and approved by a counsellor.

An afternoon was set aside for each of Grades 8 to 11, with Grade 11 students being allowed to sign up on the first day because of the necessity of their obtaining certain courses for graduation. (The incoming students from Grade 7 were not included in the Arena Scheduling because of their less flexible timetables, and, of course, their various locations in surrounding elementary schools.)

The selection of student groups was accomplished by the home room teachers' randomly assigning "colour code passes" to their students. Students then proceeded to the cafeteria where colours were drawn and groups were allowed to continue on to the arena according to the order in which the colours were picked. Needless to say, those picked in the first group had the best chance of getting their "first choice" classes.

Thus, Arena Scheduling was an attempt to give students somewhat more independence in the determination of their schedules. Courses were still basically selected under the guidance of a counsellor but the students had some say in other factors. With the addition of the extended day (i.e., starting at 8 a.m.), some students were able to complete their classes by early afternoon and retain a part-time job in addition to their studies. Should a student feel that he functions best later in the day, he might be able to construct his schedule accordingly. This is not to say that students had unlimited choice, however, as the choices, particularly in the upper grades, might be very restricted or non-existent in some instances.

It was also anticipated that counsellors would be considerably affected by Arena Scheduling. Although they would be quite busy in the spring term advising students as to course selection, it was hoped that their fall term would be mainly involved with students new to the school, rather than with students unhappy about their new computer-produced timetable. In effect, then, the bulk of their early fall referrals had been shifted to the previous summer.

EVALUATION

In order to evaluate reaction to Arena Scheduling, student and staff opinions were surveyed in October, 1975 by means of questionnaires. Random samples of approximately 35 students were drawn from each of Grades 9 to 12, whereas questionnaires were sent to all staff members at the school.

The student samples were selected from alphabetical listings of each grade. Students' names were provided to home room teachers and students were sent to the cafeteria for a single session. Where students were absent, alternates were selected from a list provided. (In some cases a few volunteers were used when a number of the preselected students were not present.) Students were given a brief explanation of the purpose of the questionnaire. Although they answered anonymously, their honesty and cooperation were solicited. The final numbers of students responding were 33, 36, 32 and 40 for Grades 9, 10, 11 and 12, respectively. The students were given enough time to answer the 13 questions and most had finished in approximately 20 minutes.

The staff received their individual questionnaires through the usual intra-school mail system and were asked to return the anonymously completed questionnaire in a few days time. Of the 108 teacher questionnaires distributed, 75 (69.4%) were returned for analysis. Only one general reminder was given to the staff to return the completed questionnaires had they not already done so.

The following summary of results deals first with the students' responses and then with the staff's returns. The questionnaire items are repeated and the percentages responding to each category are presented along with a summary of the respondents' comments, where provided. Brief explanatory remarks are also included to assist the reader.

RESULTS

STUDENTS' RESPONSES. The student questionnaire contained 13 questions dealing with Arena Scheduling. Figures are given for each of Grades 9 to 12, as well as means for the total group. The proportion of persons not responding to any item is also included.

1. *In general, how do you feel about "Arena Scheduling" in comparison with the method used in the past (i.e., random selection by computer)?*

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
A.S. much better	15.1%	5.6%	15.6%	17.5%	13.5%
A.S. better	45.5%	36.1%	50.0%	50.0%	45.4%
No difference	9.1%	0.0%	18.8%	20.0%	12.1%
A.S. worse	27.3%	36.1%	6.3%	7.5%	19.1%
A.S. much worse	3.0%	22.2%	9.4%	5.0%	9.9%

As can be seen from the above summary, the majority of students in all but Grade 10 thought that Arena Scheduling was "better" or "much better". Opinions were more polarized in Grades 9 and 10 than in Grades 11 and 12 but a greater proportion of the latter groups checked the "No difference" alternative. It was the senior students (in Grade 11 and 12) that most preferred "Arena Scheduling" to random selection by the computer.

2. *(a) How many of your "first choice" classes did you actually get signed up for?*

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
All	45.5%	22.2%	46.9%	82.5%	50.4%
Most	24.2%	33.3%	28.1%	15.0%	24.8%
Some	21.2%	27.8%	18.8%	2.5%	17.0%
None	9.1%	16.7%	6.3%	0.0%	7.8%

In terms of getting their most preferred classes, Grade 12 students were the most successful (97.5%) and Grade 10's the least successful (55.5%). In general, though, the majority of students in all grades signed up for "All" or "Most" of their "first choice" classes.

(b) How satisfied are you with the choices that you ended up with?
(i) "First Choices":

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Very satisfied	30.3%	22.2%	34.4%	30.0%	29.1%
Satisfied	48.5%	47.2%	50.0%	62.5%	52.5%
Dissatisfied	9.1%	8.3%	12.5%	7.5%	9.2%
Very dissatisfied	9.1%	11.1%	0.0%	0.0%	5.0%
No response	3.0%	11.1%	3.1%	0.0%	4.3%

(ii) Other Choices:

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Very satisfied	6.1%	0.0%	3.1%	0.0%	2.1%
Satisfied	33.3%	55.6%	34.4%	17.5%	34.8%
Dissatisfied	24.2%	25.0%	9.4%	2.5%	14.9%
Very dissatisfied	0.0%	5.6%	3.1%	0.0%	2.1%
No response	36.4%	13.9%	50.0%	80.0%	46.1%

A clear majority of students from all grades and over 81 percent of the total student sample were satisfied with their "First Choices" whereas dissatisfaction was greatest in Grades 9 and 10 but confined to less than 20 percent of each of these groups.

The figures dealing with "Other Choices" are somewhat misleading because of the large proportions not responding; many of the latter group, of course, had obtained all their first choices. However, in general, it appears that more than twice as many students were "satisfied" with their "Other Choices" than "dissatisfied", although the satisfaction was not as great as that with their "First Choices".

Many of the students' comments at this point dealt with the order of entry into the arena: if the students went into the arena in one of the first groups, they tended to get most of their first choices and were usually satisfied with those selections; if last into the arena, they got few of their first choices and were often, but not always, subsequently dissatisfied.

3. *(a) How do you feel about having some choice in setting up your timetable?*

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Think it's great	30.3%	36.1%	31.3%	42.5%	35.5%
Think it's O.K.	54.5%	38.9%	59.4%	52.5%	51.1%
Don't like it very much	9.1%	13.9%	9.4%	5.0%	9.2%
Don't like it at all	6.1%	11.1%	0.0%	0.0%	4.3%

As a total group, 86.6 percent of the students sampled thought that having some choice in setting up their timetables was "O.K." or "great". Again, negative opinions were more prominent among the junior grades as 15.2 percent of the Grade 9's and 25.0 percent of the Grade 10 students did not like the idea.

(b) Would you like to have more or less choice?

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Much more choice	30.3%	27.8%	31.3%	25.0%	28.4%
More choice	42.4%	38.9%	34.4%	52.5%	42.6%
Same as now	21.2%	5.6%	31.3%	17.5%	18.4%
Less choice	0.0%	11.1%	0.0%	0.0%	2.8%
Little or no choice (let teacher do all the scheduling)	6.1%	16.7%	3.1%	2.5%	7.1%
No response	0.0%	0.0%	0.0%	2.5%	0.7%

In general, the majority of students in all grades favoured more choice in determining their timetables. With the exception of Grade 10, in which more than one-quarter of the students opposed this trend, very few students favoured less choice than was presently available.

The prominent theme of students' comments with respect to this issue was that the more choice available, the better their chances of obtaining the classes (teacher and time) that they wanted. A few students expressed considerable disillusionment with the whole process, however, and favoured letting the computer do the scheduling and save them the effort.

4. *(a) When you selected your courses last March, were you aware enough of course content to be able to make good choices?*

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Very well aware	6.1%	8.3%	15.6%	15.0%	11.3%
Aware enough	60.6%	55.6%	40.6%	60.0%	54.6%
Not really aware	30.3%	36.1%	37.5%	25.0%	31.9%
Not aware at all	3.0%	0.0%	6.3%	0.0%	2.1%

Although the majority of students in all grades thought they were at least "Aware enough" of course content, a considerable proportion in each grade and about one-third of the total group felt that they were "Not really aware" or "Not aware at all".

(b) How could you be made more aware of course content?

The most frequent comments suggested that course descriptions be given in more detail, either through pamphlets or information sheets, through discussions with teachers about their intended courses, or through more intense sessions with the counsellors.

5. *(a) Do you feel any different about your classes this year in comparison with last year?*

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Feel much worse this year	3.0%	5.6%	0.0%	2.5%	2.8%
Feel worse this year	12.1%	25.0%	6.3%	2.5%	11.3%
Feel about the same	51.5%	36.1%	59.4%	60.0%	51.8%
Feel better this year	27.3%	25.0%	21.9%	32.5%	27.0%
Feel much better this year	6.1%	8.3%	12.5%	2.5%	7.1%

In all but the Grade 10 sample, most students felt "about the same" with respect to their classes as in the previous year. The Grade 10 sample was also more evenly divided in their feelings than were the other grades, the latter having considerably more students who felt "better" or "much better" this year than felt "worse" or "much worse".

The students' positive comments usually corresponded to success in the selection of desired teachers, whereas those students who were less fortunate in arranging their schedule generally gave negative comments. Some students felt that their classes or teachers were no different from the previous year.

(b) Do you think that Arena Scheduling has had anything to do with this feeling?

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Yes, quite a bit	24.2%	41.7%	21.9%	20.0%	27.0%
Yes, a little	42.4%	41.7%	43.8%	22.5%	36.9%
Probably not	24.2%	13.9%	25.0%	40.0%	26.2%
No, other things have affected my feelings	9.1%	2.8%	9.4%	15.0%	9.2%
No response	0.0%	0.0%	0.0%	2.5%	0.7%

In all but the Grade 12 sample, the majority of students thought that Arena Scheduling had "a little" or "quite a bit" to do with their feelings toward their classes.

Students' comments often dealt with their success or lack of it in obtaining the teachers that they wanted. Some of the Grade 12 students commented that their choice really was little affected by Arena Scheduling since specific courses were required for graduation and they might be available at only one particular time.

6. *Have you tried to change any of your courses this year?*

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Yes	33.3%	27.8%	34.4%	42.5%	34.8%
No	66.7%	72.2%	65.6%	57.5%	65.2%

Although the majority of students had not tried to change a course, over one-third of the total sample and 42.5 percent of the Grade 12 sample had tried.

Most of the students' comments stated that they simply did not like the teacher or the course and hence wanted to change.

7. *You may have picked your classes for different reasons. Of the following reasons, put a "1" beside the reason that was generally most important to you, a "2" beside the second most important reason, and so on.*

AVERAGE RATINGS*

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Teacher's personality	2.3	1.6	2.2	2.4	2.1
Time of day (block)	2.4	2.1	2.0	1.7	2.0
Having friends in same class	2.8	2.8	3.4	3.8	3.3
Time of year (semester)	2.3	3.0	2.6	3.3	2.9
Whether course was supposedly easy or hard	3.4	3.6	2.9	3.5	3.4
*Other***	6.0	4.3	6.0	1.2	3.8

*The figures presented here represent the mean ratings of all respondents who gave an item a rating of from 1 to 6. They do not include students who did not assign a value to a particular category or signified their response in some other way. Thus, each row may represent a different number of responses.

**Responses in this category were made by only two to five students.

In general, the time of day (block) and the teacher's personality were considered the most important reasons for selecting a class, with the time of year (semester) being regarded as somewhat less important. The high rating of the "Other" category for Grade 12 represented only five students and generally reflected the necessity of obtaining particular courses for graduation or to fulfill future plans.

8. *Did you find it easy to understand the Arena Scheduling program or did you find it confusing?*

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Easy to understand	27.3%	44.4%	50.0%	60.0%	46.1%
A bit confusing	57.6%	38.9%	43.8%	37.5%	44.0%
Very confusing	15.2%	16.7%	3.1%	2.5%	9.2%
No response	0.0%	0.0%	3.1%	0.0%	0.7%

Although approximately equal proportions of the total group found the program "Easy to understand" or "A bit confusing", it appeared that, in general, the lower the grade, the more confusion experienced.

Of the comments made by students with respect to this question, some stated that they felt confused initially but began to "catch on" to the procedure later. Other students, particularly in the lower grades, became confused when their desired courses were filled and they had to adjust their timetables accordingly.

9. *Can you think of any way in which the training program that taught you about Arena Scheduling could be improved?*

Some of the comments were that the program be explained in more detail, perhaps through small discussion groups, and that a "trial run" be held to acquaint students with the program. Some other comments dealt more with Arena Scheduling itself in suggesting that more choice of courses and teachers be available, that the procedure be better organized, or that Arena Scheduling not be continued.

10. *Would you like to see Arena Scheduling done at another time of year?*

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Yes	15.2%	2.8%	6.3%	35.0%	15.6%
No	84.8%	91.7%	90.6%	65.0%	82.3%
No response	0.0%	5.6%	3.1%	0.0%	2.1%

As a total group, the vast majority of the students sampled did not want Arena Scheduling done at another time of year. The Grade 12 group had the greatest proportion of dissenters, however, as 35 percent of this group favoured another time of year.

Of the relatively few student comments made with respect to this question, many favoured doing Arena Scheduling before each semester whereas a few favoured having it somewhat "earlier" than it was done previously.

11. *Did you like selecting your program for the whole year during Arena Scheduling or would you rather have done it for just one semester at a time?*

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Whole year	30.3%	29.2%	43.8%	37.5%	35.1%
One semester at a time	57.6%	43.0%	43.8%	52.5%	49.3%
Undecided, no opinion	12.1%	25.0%	9.4%	10.0%	14.2%
No response	0.0%	2.8%	3.1%	0.0%	1.4%

Although opinion was divided between the "Whole year" and "One semester at a time" options, the latter was generally favoured.

Comments supporting scheduling for each semester generally stated that such a practice would accommodate failures or allow one to change one's mind. Proponents of the "Whole year" alternative usually mentioned that they would rather get the scheduling over and done with and save everyone from the extra work and confusion of doing it twice.

12. *The order in which students went into the arena depended on the colour they received. Do you think this system was fair?*

	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
Yes	36.4%	37.5%	59.4%	60.0%	48.6%
No	63.6%	62.5%	37.5%	40.0%	50.7%
No response	0.0%	0.0%	3.1%	0.0%	0.7%

Two trends are apparent in the responses to this question: whereas the majority of the Grade 9 and 10 students thought the system was not fair, the majority of the Grade 11 and 12 samples believed that the system was fair. Overall, however, the total group was evenly divided on this issue.

Some of the students' suggestions for improving the system included allowing an entire grade into the arena at one time or by grouping students in some other fashion, e.g., alphabetically, by academic letter grades, by student numbers, by course areas (Arts and Science, etc.).

13. *Do you have any further comments, suggestions, etc. to make about the Arena Scheduling program?*

Of the reactions to this general question, some students, particularly in the Grade 10 sample, reiterated their dislike for Arena Scheduling whereas others again stated that they liked it. Other comments included mention of more courses from which to choose and a fairer method of letting students into the arena (e.g., one grade at a time).

SUMMARY OF STUDENTS' RESPONSES

The results of the student questionnaires indicated that the majority of students in all groups but Grade 10 thought that Arena Scheduling was better than the previously employed method. Although the majority of all groups got "Most" or "All" of their first choices, Grade 10's were least successful in obtaining these courses. In general, most students were satisfied with their classes, particularly their first choices, liked having some choice in setting up their timetables and would like even more choice. The majority of students felt they were aware enough of course content to make good course choices, but approximately one-third of all students felt they were not really aware and would benefit from more information.

With respect to their classes, most students felt about the same as they did in the previous year; of the remaining students, more felt better than worse. In general, the majority of students thought Arena Scheduling had at least a little to do with their feelings. Other responses showed that most students had not tried to change any of their courses, that time of day (block) and teacher's personality were generally considered the most important reasons for selecting a class, that more students in the lower than higher grades found the program confusing, and that more discussion or "trial runs" might help to reduce this confusion.

The majority of students indicated that they did not want Arena Scheduling at another time of year. The responses also showed that somewhat more students would prefer Arena Scheduling for one semester at a time rather than for the whole year. Students were rather evenly divided as to whether the system allowing them into the arena was fair with the younger students being more negative in their evaluation than the students in the senior grades. Additional comments tended to confirm students' dislike or liking for Arena Scheduling, mentioned the desire for more courses and teachers and stressed the need for a fairer method of allowing students into the arena.

TEACHER'S RESPONSES. The teacher questionnaire was composed of 14 questions dealing with Arena Scheduling. Percentages responding to each item are presented below and are based on a total of 75 completed questionnaires. Brief remarks follow the summary of responses for each question and teachers' comments are presented where provided.

1. *In general, how do you feel about the Arena Scheduling program?*

Very positively	18.7%
Positively	64.0%
Indifferent, undecided	12.0%
Negatively	5.3%
Very Negatively	0.0%

As can be seen from the above summary, over 82 percent of the teachers responding felt positively about Arena Scheduling.

2. *In terms of its mechanics, how effective do you think the program was for scheduling students?*

Very effective	9.3%
Effective	64.7%
Not very effective	20.7%
Not effective at all	0.0%
No response	5.3%

Although almost three-quarters of the teachers thought that the program was effective, 20.7 percent did not.

3. (a) *Did you find that you had fewer or more problems related to student scheduling this fall than in previous years?*

Many fewer this fall	24.0%
Fewer this fall	48.0%
Same as in previous years	24.0%
More this fall	0.0%
Many more this fall	1.3%
No response	2.7%

Whereas the majority of teachers thought that fewer scheduling problems had been noted "this fall", almost one-quarter of the respondents saw no difference from previous years.

(b) Taking the scheduling problems experienced in June, as well as this fall, were the total number of problems related to enrolment for this year different than in the past?

Many fewer this year	13.3%
Fewer this year	53.3%
Same as in previous years	26.7%
More this year	0.0%
Many more this year	1.3%
No response	5.3%

Again, although about one-quarter of the teachers saw no difference in the number of problems, the majority thought that fewer problems arose "this year".

(c) Were you able to make more effective use of your time in the first week(s) of classes this year in comparison with previous years?

Yes	73.3%
No	18.7%
No response	8.0%

Most teachers felt that they made more effective use of their time in the first week(s) of "this year" than previously.

Many of the comments regarding this item mentioned that classes were started sooner since first-week classes tended to be more stable than in the past.

4. *How do you feel generally about the philosophy of giving the students more choice in the determination of their schedule?*

Very much in favour	41.3%
In favour	52.0%
No opinion, undecided	2.7%
Opposed	4.0%
Very much opposed	0.0%

As can be seen, the vast majority of teachers were in favour of giving students more choice in determining their schedules.

5. *In general, how have the students reacted to the increased freedom in the determination of their schedules?*

Very positively	13.3%
Positively	54.0%
Indifferent, no reaction	24.0%
Negatively	4.7%
Very negatively	1.3%
No response	2.7%

The majority of teachers thought that students had reacted "Positively" or "Very positively" to their increased freedom but 24 percent saw the students as being indifferent.

Teachers' comments included descriptions of mixed student reaction in which enthusiasm varied with the ability to get desired courses. Other teachers' comments included both positive and negative student reaction.

6. *What changes, if any, in the following areas have you noticed this year in comparison with previous years, which might be attributable to the Arena Scheduling program?*

(a) General "tone" of the school:

Worse this year	5.3%
No change	57.3%
Better this year	27.3%
Changed, but due to other factors	6.0%
No response	4.0%

(b) Incidence of discipline problems, rowdyism, vandalism, etc.:

Worse this year	10.7%
No change	61.3%
Better this year	20.7%
Changed, but due to other factors	6.0%
No response	1.3%

(c) Absenteeism:

Worse this year	2.0%
No change	62.7%
Better this year	30.7%
Changed, but due to other factors	3.3%
No response	1.3%

(d) Number of interim reports this fall:

More this year	5.3%
No change	61.3%
Fewer this year	26.7%
Changed, but due to other factors	2.7%
No response	4.0%

(e) Classroom atmosphere:

Worse this year	1.3%
No change	57.3%
Better this year	29.3%
Changed, but due to other factors	4.0%
No response	8.0%

(f) Student criticism of course:

Increased this year	0.0%
No change	60.0%
Decreased this year	25.3%
Changed, but due to other factors	2.7%
No response	12.0%

(g) Staff/student rapport:

Worse this year	0.0%
No change	64.0%
Better this year	29.3%
Changed, but due to other factors	1.3%
No response	5.3%

With respect to each of the aspects mentioned in Question 6, the majority of teachers noticed no change which might be attributable to the Arena Scheduling program. However, of the remaining teachers, more saw positive changes than saw negative changes in each of the seven areas listed.

7. *(a) In your opinion, was the Arena Scheduling program worth the time which was spent in preparing and carrying it out.*

Yes	74.7%
No	9.3%
No opinion, undecided	13.3%
No response	2.7%

Almost three-quarters of the teachers thought the Arena Scheduling program was worth the time invested in it.

The few comments with respect to this question included general approval of the program, mention of needed improvement in certain areas, and negative reaction by some students.

(b) How would you weigh the advantages and disadvantages of the program?

Advantages outweigh disadvantages	74.7%
Disadvantages outweigh advantages	4.0%
No opinion, undecided	20.0%
No response	1.3%

Again, about three-quarters of the responding teachers thought that the advantages of the program outweighed the disadvantages. Twenty percent had no opinion or were undecided, however.

The few comments included statements of increased responsibility being valuable to the students and of the program's not really fulfilling its promise of freedom.

(c) How do you feel about the retention of the Arena Scheduling program?

Retain it as is	8.0%
Retain it with some revisions	78.7%
Return to the previous scheduling system	9.3%
Other	0.0%
No response	4.0%

Responses to this question clearly indicate that most teachers would like to see a revised version of the Arena Scheduling program retained.

8. *In your opinion, was there a tendency among the staff to view the Arena Scheduling program as a "popularity contest"?*

Yes	44.0%
No	46.7%
No response	9.3%

If yes, how did the staff generally feel about this aspect of the program?

Very negatively	9.1%
Negatively	50.0%
Positively	22.7%
Very positively	0.0%
No response	18.2%

The teachers were evenly divided with respect to the "popularity contest" issue. Of those who responded to the second part of the question, most saw the staff as reacting negatively rather than positively to this aspect of the program.

9. *Do you favour the use of Arena Scheduling in scheduling for the whole year or one semester at a time?*

Whole year	37.3%
One semester at a time	50.7%
No opinion	8.0%
Other	1.3%
No response	2.7%

Although somewhat more than one-third of the teachers preferred scheduling for the whole year, one-half of the group favoured the "One semester at a time" option.

Teachers' comments favouring "One semester at a time" mentioned the flexibility of that system in allowing for failures, changes in the students' thinking, etc. Those favouring the whole-year approach stressed the saving of time involved in scheduling. Others reserved judgment until the second semester of the present year.

10. *Do you feel that Arena Scheduling should be employed with all grades in the school or just particular grades?*

All grades	49.3%
Just grades - 9, 10 & 11	4.0%
- 9, 10, 11 & 12	28.0%
- 10, 11 & 12	2.7%
- 11 & 12	10.7%
No response	5.3%

Although many of the teachers favoured the use of Arena Scheduling in all grades, a few teachers preferred employing it in only the more senior grades. (Some confusion may have existed in the response to this question. Whereas some teachers may have interpreted "All grades" to mean the current grades of those students who would be preparing their schedules for the next year (i.e., present Grade 8's, 9's, 10's and 11's), other teachers may have indicated their answer in terms of the grades students would be in next year. Thus, it seems likely that "All grades" and "Grades 9, 10, 11 and 12" are meant to refer to the same students.)

Many of the teachers comments reiterated the exclusion of the incoming Grade 8 students from Arena Scheduling and others mentioned the difficulty that some of the junior students were having with Arena Scheduling.

11. *Do you feel that your presence was necessary during the Arena Scheduling sessions?*

Yes	69.3%
No	26.7%
No response	4.0%

If no, who could replace you?

Although the majority of teachers thought that their presence was necessary during Arena Scheduling, more than one-quarter did not.

Suggestions regarding replacements included other teachers, senior students or anyone who could perform a clerk's function of writing down names.

12. *Do you have any specific comments or suggestions to make about the following aspects of the Arena Scheduling program?*

(a) The coloured card system which determined the order in which students entered the arena:

Some of the more-often mentioned comments included the use of the new gym (or larger area) and admitting a whole grade at once, statements that the system was reasonably fair or statements that it was very poor and proved to be unfair to a number of students.

(b) Cut-off points for class enrolment (i.e., methods of balancing class size):

Whereas some teachers thought that the method used was satisfactory, others stated that cut-off points must be firmly established and adhered to, which was not the case in the first Arena Scheduling attempt. Some teachers suggested stopping enrolment somewhat below final maximums to allow for later scheduling of "problem" cases.

(c) Location of the arena:

Many of the teachers who commented suggested that the arena be moved to the new gym (or a larger area), although others seemed to think the previous location was adequate. Some teachers felt the previous location was very poor and a few suggested that teachers remain in their home rooms for scheduling.

(d) Time of day (i.e., morning or afternoon):

Responses to this item were divided almost equally between morning or afternoon preferences. Some teachers, however, suggested all-day sessions.

(e) Time of the year:

June was the scheduling time preferred by most of the teachers who commented. Those favouring scheduling for each semester often suggested June and January as scheduling points.

13. *(a) In general, how well did the students understand the Arena Scheduling program (i.e., did they know what to do)?*

Very well	29.3%
To some extent	55.3%
Not very well at all	10.0%
No response	5.3%

Although most of the teachers thought that the students understood the program "To some extent", fewer than one-third of the responding staff members felt that the students understood the program "Very well".

Teachers' comments seemed to confirm that some students, particularly those in the junior grades, were confused during the scheduling process, especially when they had to resort to alternate choices if classes were full.

(b) How might the training program which informed students about Arena Scheduling be improved, if at all?

Although some teachers thought the training program was adequate, others believed students would benefit from more discussions or counselling or perhaps by having a "trial run" through the procedure. A few teachers thought that having had experience with Arena Scheduling once, the next time would be less confusing.

14. *Do you have any further comments, suggestions, etc. to make about the Arena Scheduling program?*

This question resulted in a wide variety of responses, many of which had been stated or implied in response to other questions. Comments included many suggested modifications to Arena Scheduling by such means as the use of computer cards instead of written lists, use of a larger arena,

allowing teachers to be more selective of students, considering pre-registration in possibly two courses, allowing one grade into the arena at one time, and providing more assistance to students having difficulty. In general, virtually all of the comments appeared basically to support the concept of Arena Scheduling but suggested that the program would benefit from modification and revision.

SUMMARY OF TEACHERS' RESPONSES

Responses to the teacher questionnaire showed that the majority of teachers:

- felt positively about Arena Scheduling,
- thought that the program was effective for scheduling students,
- felt that fewer scheduling problems were experienced, and
- thought that more effective use of time was made in the first week(s) of classes in comparison with previous years.

Also noted was that most teachers were in favour of giving students more choice in determining their schedules and thought students had reacted positively to the increased freedom of choice.

Although the majority of teachers saw no change in a variety of descriptors of the school environment, more of the remaining staff saw improvement than saw a worsening in terms of these indicators. Almost three-quarters of the teachers thought that the Arena Scheduling program was worth the time invested in it and that its advantages outweighed its disadvantages, but that it should be retained with some revisions having been made.

Responses were divided as to whether the staff viewed the program as a "popularity contest" but many of those who recognized this aspect reacted negatively. Somewhat more teachers favoured scheduling for one semester at a time than for the whole year but most felt that Arena Scheduling should be applied to all grades in the school. Most teachers also felt that their presence was necessary during the scheduling sessions. Many suggestions were offered with respect to particular aspects of the scheduling procedure and training program. Most teachers also thought that students understood the Arena Scheduling program only "To some extent".

CONCLUSIONS

In summary, both staff and students were generally in favour of the Arena Scheduling program. However, many modifications were suggested to improve the program. Although it seems unlikely that every student will be able to get all of his or her first choices, it is probable that letting an entire grade at once into a larger area will help to combat some of the frustration and unfairness perceived by those students who were last to enter the arena in the first Arena Scheduling sessions. Other suggestions for speeding up the registration process (e.g., computer cards) and avoiding needless waits in long line-ups (e.g., posting a notice when classes are full) might also be quite useful in making the process more efficient.

Even though many students will have benefited from their first scheduling experience and hence find subsequent sessions easier, many others, particularly in the junior grades, will undoubtedly require more guidance and assistance.

Other issues which also merit consideration include:

-whether scheduling should be done one semester at a time or for the whole year,

-whether the number of classes or options should be increased, and

-how to establish suitable cut-off points for class-size so that students with special needs may be accommodated.

In summary, Arena Scheduling was reasonably successful for the first attempt. Since most of the problems do not appear to be insurmountable, it seems likely that an improved version of Arena Scheduling will be attempted at Templeton Secondary School next year.